

**In the Claims:**

Please enter the following amended claim set:

1.     **(Original)**    A method of treating water comprising the steps of:  
  
          exposing water desired to be treated to ozone in sufficient quantity to reduce  
a concentration of undesired microorganisms therein;  
  
          flowing the water over a colony of attached algae to remove undesired matter  
therefrom;  
  
          stopping the water flow;  
  
          harvesting the algal colony, leaving a colony base;  
  
          adding a pesticide to the colony base to detoxify the colony base;  
  
          permitting the pesticide to achieve substantial detoxification; and  
  
          detoxifying the pesticide.
  
2.     **(New)** A method of treating water comprising the steps of:  
  
          exposing water desired to be treated to ozone in sufficient quantity to oxidize  
nutrients therein to a form amenable to bioassimilation by a colony of attached algae, the  
ozone in a form for optimizing contact with components in the water; and  
  
          flowing the water over a flowway comprising attached algae to remove the  
oxidized nutrients therefrom, the algae experiencing an enhanced photosynthetic activity  
upon bioassimilation of the oxidized nutrients.
  
3.     **(New)** The method recited in Claim 2, further comprising the steps of:  
  
          generating ozone gas; and

dissolving the ozone in the water to achieve optimization of contact with the water components.

4.     **(New)** The method recited in Claim 2, further comprising the steps of:  
generating ozone gas; and  
breaking the ozone into small bubbles to achieve optimization of contact with the water components.

5.     **(New)** The method recited in Claim 2, wherein the exposing step comprises one of mixing the ozone and the water in a mixing chamber and using a mixing pump to mix the ozone and the water.

6.     **(New)** The method recited in Claim 2, wherein the exposing step comprises mixing ozone into water to be treated in a covered enclosure, and further comprising the step of preventing unassimilated ozone from escaping from the enclosure.

7.     **(New)** The method recited in Claim 2, wherein the exposing step comprises mixing ozone into water in a subsurface tank using a high-pressure injector.

8.     **(New)** A method of increasing an effectiveness of a floway comprising a colony of attached algae comprising the steps of:  
exposing water desired to be treated to ozone in sufficient quantity to destroy periphyton-consuming microinvertebrates and eggs thereof;

flowing the water over the flowway to remove undesired microorganisms therein, the algae effectiveness improved in the absence of the periphyton-consuming microinvertebrates and eggs thereof.

**9. (New) A method of treating water comprising the steps of:**

exposing water desired to be treated to ozone in sufficient quantity to oxidize nutrients therein to a form amenable to bioassimilation by a colony of attached algae, the ozone in a form for optimizing contact with components in the water;

flowing the water over a flowway comprising attached algae to remove the oxidized nutrients therefrom; and

exposing water exiting the flowway to ozone in sufficient quantity to further purify the water.

**10. (New) A system of treating water comprising:**

an ozone generator;

a mixing chamber for exposing water desired to be treated to ozone in sufficient quantity to reduce a concentration of undesired microorganisms therein;

means for channeling the water to be treated into the mixing chamber and for introducing the generated ozone into water in the mixing chamber;

a colony of attached algae adapted to remove undesired matter from the ozonated water;

means for channeling ozonated water from the mixing chamber to the algal colony;

a harvester for harvesting the algal colony, leaving a colony base; and  
means for adding a pesticide to the colony base to detoxify the colony base.

**11. (New)** A system of treating water comprising:

an ozone generator;

a mixing chamber for exposing water desired to be treated to ozone in sufficient quantity to oxidize nutrients therein to a form amenable to bioassimilation by a colony of attached algae, the ozone in a form for optimizing contact with components in the water;

means for channeling water to be treated into the mixing chamber and for introducing generated ozone into the water to be treated in the mixing chamber;

a floway comprising attached algae adapted to remove the oxidized nutrients therefrom, the algae experiencing an enhanced photosynthetic activity upon bioassimilation of the oxidized nutrients; and

means for channeling ozonated water from the mixing chamber onto the floway.

**12. (New)** The system recited in Claim 11, further comprising means for dissolving the ozone in the water to achieve optimization of contact with the water components.

**13. (New)** The system recited in Claim 11, further comprising means for breaking the ozone into small bubbles to achieve optimization of contact with the water components.

14. **(New)** The system recited in Claim 11, wherein the mixing chamber comprises a covered enclosure, and further comprising means for preventing unassimilated ozone from escaping from the enclosure.

15. **(New)** The system recited in Claim 11, wherein the mixing chamber comprises a subsurface tank, and further comprising a high-pressure injector positioned to inject generated ozone into water to be treated in the subsurface tank.

16. **(New)** The system recited in Claim 11, further comprising:  
a second mixing chamber for exposing water exiting the floway to ozone is sufficient quantity to further purify the water; and  
means for channeling water from the floway to the second mixing chamber.

17. **(New)** A system of increasing an effectiveness of a floway comprising a colony of attached algae comprising the steps of:  
an ozone generator;  
a mixing chamber for exposing water desired to be treated to generated ozone in sufficient quantity to destroy periphyton-consuming microinvertebrates and eggs thereof;  
means for channeling water to be treated into the mixing chamber and for injecting generated ozone into the water to be treated;

a flowway to remove undesired microorganisms therein, the algae effectiveness improved in the absence of the periphyton-consuming microinvertebrates and eggs thereof; and

means for channeling ozonated water from the mixing chamber onto the flowway.

**18. (New)** The system recited in Claim 17, further comprising:

a second mixing chamber for exposing water exiting the flowway to ozone is sufficient quantity to further purify the water; and

means for channeling water from the flowway to the second mixing chamber.